# **Coldwater Fish Production**

# **Statewide Hatchery Report 2018**

TWRA Fisheries Report No. 19 – 01



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**Tennessee Wildlife Resources Agency** 

**Fisheries** 



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5107 Edmondson Pike Nashville, Tennessee 37211

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Edited by David Roddy

March 2019

Cover photo: Spawning rainbow trout at Erwin National Hatchery

Tennessee Wildlife Resources Agency
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5107 Edmondson Pike
Nashville, Tennessee 37211



Development of this report was financed in part by funds from Federal Aid in Fish and Wildlife Restoration (Public Law 91-503) as documented in Federal Aid Project FW-6 (TWRA Projects 1307, 2354, 3355, 4354, 4356, 7320, and 7356). Under Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, the U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, or handicap. If you believe you have been discriminated against in any program, activity, or facility as described above, or if you desire further information, please write to: Office of Equal Opportunity, U.S. Department of the Interior, Washington, D.C. 20240.

## **Table of Contents**

Acknowledgements	1
Introduction	1
2018 Trout Hatchery Summary	2
TWRA Hatcheries	10
Flintville	10
Buffalo Springs	14
Erwin	18
Tellico	22
TWRA Warmwater Hatchery	26
Humboldt	26
Gatlinburg Trout Hatchery	28
US Fish and Wildlife Service.	30
Dale Hollow National Fish Hatchery	30
Erwin National Fish Hatchery	34
Appendix A	
Stocking Totals by Fishery	36
Tailwaters	36
Reservoirs	37
Spring Streams and Lakes	38
Winter Trout Program	41
Delayed-Harvest Program	42

#### Acknowledgements

This report was made possible by the personnel at Tennessee Wildlife Resources Agency (TWRA), US Fish and Wildlife (USFWS) hatcheries and the city of Gatlinburg's hatchery who produces and stock trout in Tennessee. Hatchery staff are dedicated and passionate; they often work around the clock cleaning egg trays and fry troughs in the spring and removing leaves from intake screens in the fall. Without these hardworking crews, trout anglers would have few trout to harvest in Tennessee waters. This report is a compilation of the 2018 stocking records provided by hatchery managers.

#### Introduction

Tennessee offers a variety of trout fishing opportunities. A 2012 angler survey conducted by the University of Tennessee reported that about 104,000 anglers fish for trout in Tennessee annually. Trout anglers represented 15% of all anglers in Tennessee; this was an increase from 9.5% in 2010.

TWRA trout hatcheries play a critical role maintaining traditional fisheries and expanding opportunities. TWRA stocks trout to create fisheries in seasons or waters that are otherwise not used by anglers. TWRA's winter trout program has demonstrated that stocking waters that are convenient to the public is a promising strategy for recruiting more trout anglers.

Although there are numerous wild trout streams in Tennessee (unstocked waters), most anglers rely on stocked streams, tailwaters and lakes for their trout fishing. Rainbow trout are uniquely suited for stocking because they are among a short list of species that can efficiently be grown to large lengths in a hatchery. Rainbow trout are commonly stocked at a length of 9-12 inches which is large enough to be appreciated and likely harvested by the average angler. In locations with acceptable habitat, large numbers of smaller trout (4-7 inch) are stocked. These fish are expected to grow to desirable sizes naturally. Brown, brook and lake trout are commonly stocked at small sizes in Tennessee.

This report provides an overview of the trout stocking program in Tennessee in 2018. The first section provides a summary of all trout production in the state. The next section contains production and accomplishments at each individual hatchery involved in trout production in Tennessee. The last section provides stocking totals for each type of fishery. All data are based on 2018 <u>calendar</u> year distribution records. Some stocking information may deviate from the calendar year, due to Winter and Delayed-Harvest seasons. A comprehensive coldwater production database is located at the Fisheries Division in Nashville.

### **2018 Trout Hatchery Summary**

TWRA operates four trout hatcheries: Erwin State Hatchery, Tellico Hatchery, Buffalo Springs Hatchery and Flintville Hatchery. Hatcheries are operated for optimized production to maximize quantity and minimize fish health issues. Hatcheries produced approximately 333,000 pounds of trout (807,300 trout) at a cost of \$1.24 million in 2018 (Table 1). Estimated annual production (pounds) is the total pounds stocked minus pounds of startup trout if applicable (Table 1). "Startup" trout are those trout received from another hatchery that are grown to stock size at the receiving hatchery. Buffalo Erwin and Tellico hatcheries receive startup trout. Humboldt Hatchery, a warmwater hatchery, plays a minor role in annual trout production (approximately 6,000 pounds) in the Winter Stocking Program. The rainbow trout are acquired from the Flintville Hatchery and Dale Hollow National Hatchery, where they are held in ponds and in a 100-foot double-sided raceway at Humboldt until the appropriate release date. These trout are stocked in West Tennessee ponds and small lakes.

The Winter Trout Program gives anglers an opportunity to fish for trout in waters that would normally not support them, due to elevated water temperatures during other periods of the year. 100,843 rainbow trout (39,079 pounds) consisting of 101 stocking trips were conducted from the end of November 2017 to the middle of March 2018.

A new feed contract was awarded to the Bio-Oregon fish food manufacturer in June of 2016. This premium feed may have in part contributed to the increase production pounds produced at TWRA hatcheries. A color enhancing pigment (Astaxanthin) is added to the 4 and 6 millimeter pellet feed. This pigment increases the color of rainbow and brook trout externally and gives the flesh a pink color, similar to that of salmon.

The Buffalo Hatchery's water source was analyzed for the presence of nitrogen gas in a supersaturated state, which started in December 2017 and continued throughout the 2018 calendar year. Data showed that nitrogen supersaturation was high during the rainy periods of winter and spring and also during isolated rain events throughout the year. It was determined that the high nitrogen gas was a factor in causing stress with trout fingerlings inside the hatchery building and outside raceways. The hatchery staff installed liquid oxygen injected PVC packed columns containing "bio balls" on the fry troughs in the hatchery building. These packed columns reduced nitrogen gas to an acceptable range. The staff installed a LHO (low head oxygenator) in one section of raceway and added a 15 inch diameter packed column in the head tank of another raceway. Both additions helped reduce nitrogen gas in the outside raceway sections.

The staff was also able to recognize the early onset of coldwater fish disease and started a medicated feed treatment to ward off high mortality of fingerlings inside the hatchery building and outside raceways.

Table 1. Total trout delivered (stocked into Tennessee waters and transferred to other hatcheries), estimates of annual production, and estimated cost for TWRA's primary trout hatcheries in 2018.

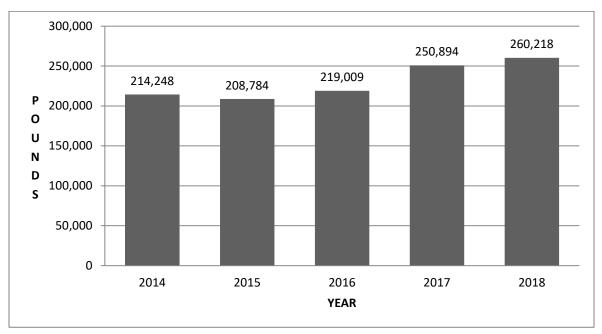
			Buffalo	
	Erwin State	Tellico	Springs	Flintville
Number of Trout	80,366	143,563	473,808	109,535
Stocked or Transferred	80,300	145,505	475,808	109,555
Pounds of Trout	56,265	99,546	135,835	41,249
Stocked or Transferred	30,203	<i>77,5</i> 40	155,655	41,247
Number of Stocking	203	190	246	153
Trips	203	170	240	133
<b>Estimated Net Annual</b>	43,792	41,829	132,985	41,249
<b>Production (lbs)</b>	73,772	71,027	132,703	71,27
<b>Annual Hatchery</b>	\$275,198	\$290,647	\$387,414**	\$289,270
<b>Budget</b> (FY17/18)	Ψ273,176	Ψ270,047	Ψ307,+1+	Ψ207,270
Est. Cost per Pound of				
<b>Estimated Production</b>	\$6.28	\$6.95	\$2.91	\$7.01
(FY17/18)***				
<b>Estimated Cost per</b>				
Pound of Trout Stocked	\$4.89	\$2.92	\$2.85	\$7.01
(FY17/18)***				

<sup>\*\*</sup> Buffalo Spring's budget was calculated as the total budget (\$479,960) minus an estimated cost for the TWRA employee who delivers Dale Hollow NFH fish (\$64,151) and his hauling truck (\$28,425) stationed at Buffalo Springs Hatchery.

Net annual production (pounds) = gross production (pounds) – start up (pounds).

<sup>\*\*\*</sup> Estimation of costs per pound is the actual budget expenditures which are spent on production and stocking. It does not account for other activities performed by hatchery staff, therefore it should be considered an overestimation.

Several factors affect trout production from year to year. Feed quality and consumption, water quality (temperature, oxygen levels and nitrogen supersaturation), fish densities in raceways and predation. Figure 1 shows the yearly net production for a 5-year period at all the TWRA hatcheries. Figure 2 shows the yearly trout numbers stocked for a 5-year period by all the TWRA hatcheries.



**Figure 1.** Net production of trout (pounds) by TWRA hatcheries. Net production = gross production (pounds) – start up (pounds).

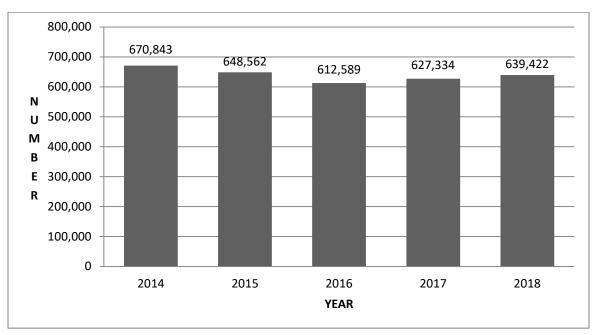
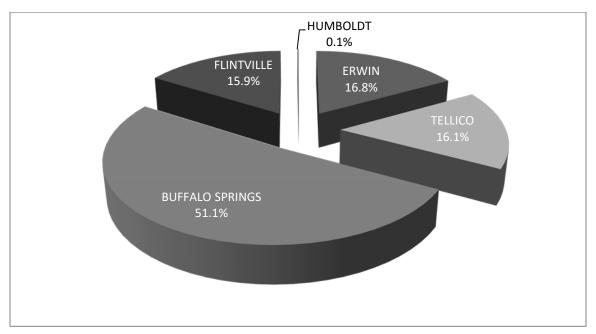


Figure 2. Number of individual trout stocked by TWRA hatcheries

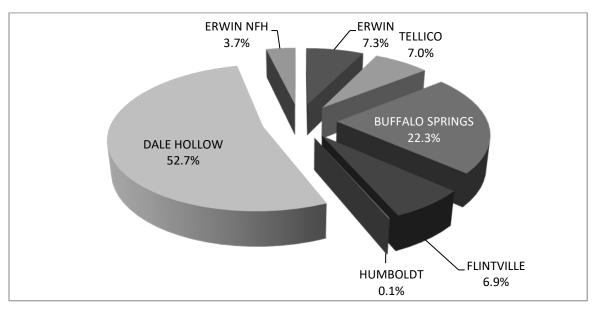
In 2018, TWRA hatcheries produced 260,218 pounds of trout for Tennessee waters. Figure 3 shows the contribution by each hatchery.



**Figure 3.** Percent net production (pounds) by TWRA hatcheries. Net production = gross production (pounds) – start up (pounds).

Two USFWS hatcheries play a critical role in trout production in Tennessee. Dale Hollow National Fish Hatchery (DHNFH) produced an additional 314,984 pounds of trout (1.1 million fish). Erwin National Fish Hatchery stocked approximately 22,200 pounds of large brood fish (12-20 inches).

Dale Hollow NFH produced the most pounds (52.7%) of any Tennessee hatchery (Figure 4). Tennessee waters are stocked with four species of trout. All hatcheries raise and stock rainbow trout, which is the highest percentage of stocked fish (Figure 5).



**Figure 4.** Percent net production (Pounds) by all hatcheries. Net production = gross production (pounds) – start up (pounds).

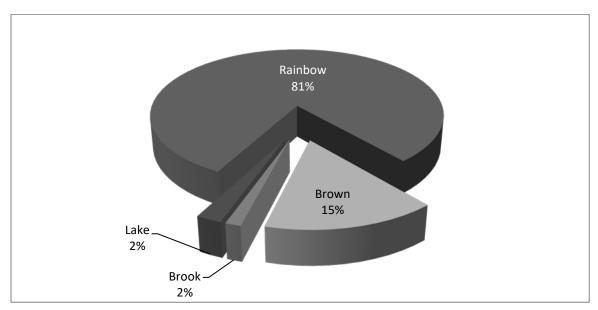


Figure 5. Percent by number of trout species stocked in Tennessee.

Along with rainbows, Dale Hollow NFH stocked brook, brown, and lake trout. Tellico Hatchery is the only state hatchery that stocked rainbow and brown trout. A total of seven hatcheries stock approximately 1.7 million trout (607,000 pounds) in Tennessee waters. Eighty-six percent of all trout stocked are 7 inches or greater (Table 2).

Table 2. Total number and weight of trout stocked by each hatchery in 2018 (does not include hatchery transfers). FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches.

					Number of
				Weight	Stocking
Hatchery	Species	Stage	Number	(lbs)	Trips
ERWIN	BROOK	FING	125	1	1
ERWIN	RAINBOW	ADULT	80,241	56,264	202
TELLICO	BROWN	ADULT	15,019	9,616	40
TELLICO	RAINBOW	ADULT	125,749	88,953	162
TELLICO	RAINBOW	FINGL	8	48	1
<b>BUFFALO SPRINGS</b>	RAINBOW	ADULT	205,681	114,474	217
<b>BUFFALO SPRINGS</b>	RAINBOW	FING	154,619	3,643	9
FLINTVILLE	RAINBOW	ADULT	88,211	33,936	144
ARMSTRONG	RAINBOW	ADULT	7,000	3,210	2
DALE HOLLOW USFWS	BROOK	ADULT	22,342	8,354	12
DALE HOLLOW USFWS	BROWN	ADULT	207,199	46,252	55
DALE HOLLOW USFWS	BROWN	FING	39,821	4,852	10
DALE HOLLOW USFWS	LAKE	ADULT	39,874	3,676	5
DALE HOLLOW USFWS	RAINBOW	ADULT	602,195	195,972	302
DALE HOLLOW USFWS	RAINBOW	FING	29,848	1,399	2
ERWIN USFWS	BROOK	ADULT	1,678	1,854	3
ERWIN USFWS	RAINBOW	ADULT	7,252	15,446	19
ERWIN USFWS	RAINBOW	FING	22,029	748	3
GATLINBURG	RAINBOW	ADULT	40,955	12,485	53
HUMBOLDT	RAINBOW	ADULT	15,710	5,729	23
Total			1,705,556	606,912	1,265

Flintville Hatchery was established in 1933 and is Tennessee's oldest trout hatchery. This hatchery grows specifically the all-female Kamloop stain of rainbow trout from eggs to a variety of sizes for waters in middle and West Tennessee. Flintville's trout are primarily stocked in hatchery-supported streams and winter trout areas, as well as a few tailwaters.

Buffalo Springs Hatchery produces trout for hatchery-supported streams, reservoirs, and tailwaters in East Tennessee. They receive eggs from disease-free sources, such as Erwin National Fish Hatchery. Eggs are incubated and hatched, producing fry that are grown to various sizes. Buffalo Springs Hatchery supplies Erwin State Fish Hatchery with fingerling (4-5 inch) rainbow trout as their starter fish. Similarly, Buffalo Springs Hatchery provides 6-inch rainbow trout to the City of Gatlinburg's hatchery to be grown out and stocked in Gatlinburg streams. Normally three streams (LeConte Creek, Roaring Fork, and West Prong Little Pigeon River) are stocked by the City of Gatlinburg.

Erwin State Hatchery relies on starter fish from Buffalo Springs Hatchery. Most fish produced at Erwin State Hatchery are 10-inch rainbow trout to be stocked in hatchery-supported streams in upper east Tennessee. Erwin also receives a few retired brood fish for stocking from Erwin National Hatchery.

Tellico Hatchery receives 9-inch rainbow trout from DHNFH. These fish are then grown to 11-12 inches and stocked frequently into the Tellico River, Citico Creek, and Green Cove Pond. This intense management requires additional fees to support the program and a special Tellico-Citico permit is required to fish these waters. Several Polk County streams are also stocked with trout from this hatchery. Tellico usually acquires broodstock of the Southern Appalachian strain brook trout and successfully spawn them, but was unable due to drought conditions.

Tennessee relies heavily on trout from DHNFH to stock tailwaters and reservoirs, and to supply trout to Tellico Hatchery. DHNFH produced 314,984 pounds of trout (1.1 million fish) in 2018. Most of these fish were produced to mitigate for fisheries that were permanently lost due to the construction and operation of dams. Ninety-four percent of all brown trout and one-hundred percent of lake trout stocked in Tennessee are from DHNFH.

In addition to production, hatchery staff is responsible for the delivery of trout according to the schedule developed by the management team. Hatchery drivers made 1,268 stocking trips in 2018. Figure 6 shows the number of trout stocked in specific habitats. Tailwaters receive the highest number of trout and stocking trips. See Appendix A, for individual stocking totals by program.

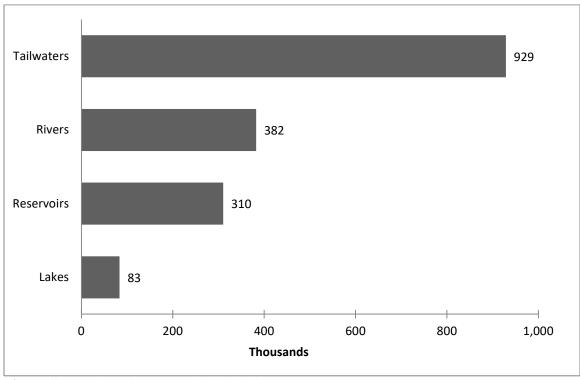


Figure 6. Number of trout stocked by habitat.

### Flintville Hatchery

**Location:** 20 acres owned by TWRA within the 750-acre Flintville Wildlife Management Area located near Flintville along HWY 64 in Lincoln County.

**Hatchery Operation:** Spring water is collected from pipes in Warren Hollow to supply water to the hatchery building and the concrete outdoor raceways. Inside the hatchery building there are eight concrete rearing tanks (28 ft x 2.5 ft) with 40 gallons per minute flow that are used to incubate eggs and rear small trout. Outside there is one long raceway (960 ft x 8 ft x 3 ft) with an average flow of 700 gallons per minute. This raceway was renovated in 2007. A second raceway (410 ft x 5 ft) is not used due to poor structural integrity and variable flow from the main raceway and water from Crowder Spring. The third raceway (265 ft x 8 ft) reuses water from the main raceway and from Crowder Spring to maintain a flow of about 500 gallons per minute. In 2016, a fourteen foot-diameter circular tank was put into production for rearing trout from 3 inches to 10 inches.

Flintville Hatchery typically purchases eggs from the Trout Lodge Hatchery, a private hatchery in the State of Washington. These eggs cost about \$40 per thousand. They are worth the additional cost because they reliably survive and grow very well requiring little maintenance. Another advantage is that they are a unique strain, Kamloops, which does very well in some locations when stocked as fingerlings. TWRA benefits from having this strain that is not available through the USFWS egg program. Eggs are incubated, hatched and reared in the hatchery building and then moved outside when they reach suitable sizes.

A fourteen foot diameter circular culture tank was in operation, producing 6,086 rainbow trout, weighing 869 pounds and measuring 7 inches in length. The trout were hatched 3/1/2018 and harvested 12/12/2018, consisting of a production period of nine months. These fingerlings were added to the outside raceways for continued grow-out.

Flintville Hatchery stocks most of its trout as large fish 10-12 inches in streams and tailwaters in middle Tennessee. Flintville Hatchery also produces a large number of trout for the Winter Trout Program. In a typical year about 18,000 miles are driven while stocking trout. All of the stockings are done in a single day with no overnight travel. Their staff's longest trip is to Collierville at Johnson Park, a round trip of 450 miles requiring approximately 14 hours.

Hatchery staff consists of a Manager, Technician II, Technician I and a Part-Time Technician I.

#### **ACCOMPLISHMENTS:**

- Production information (Table 3)
- Locations stocked (Table 4)
- Five-year production summary (Figure 7)

#### **Other Activities:**

The opportunity for self-guided hatchery tours is provided to the public Monday through Friday. Hatchery staff provides an average of 6 scheduled tours to schools, community organizations and local government officials annually. Visitation averages approximately 800 visitors per year.

- Flintville staff hosted the First Annual Open House at the hatchery, with over 200 in attendance in October 2018.
- Approximately 20 acres of wildlife food plots were planted on the Flintville Hatchery Wildlife Management Area in 2018.

Table 3. Summary of Flintville Hatchery:

Number of Trout Stocked	109,535
Pounds of Trout Stocked	41,249
Number of Stocking Trips by Flintville Drivers	153
Estimated Annual Production (lbs)*	41,249
Annual Hatchery Budget Spent (FY17/18)	\$289,270
Estimated Cost per Pound of Production (FY17/18)**	\$7.01
Estimated Cost per Pound of Trout Stocked (FY17/18)**	\$7.01

<sup>\*</sup> Production is estimated as the total pounds stocked plus trout transferred to others hatcheries.

Therefore, this is an overestimation.

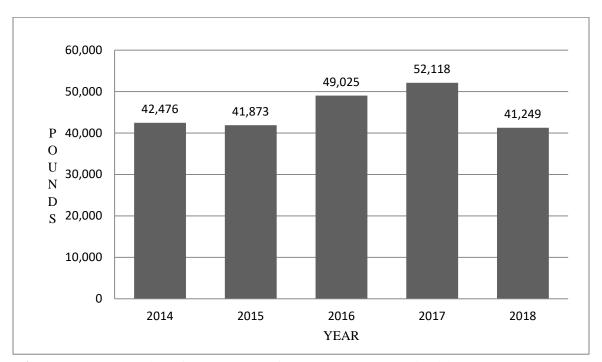
<sup>\*\*</sup>Cost estimates assume that all the money spent in the budget was on trout production.

Table 4. Total number and weight of trout stocked from Flintville Hatchery in Tennessee waters. ADULT = trout > 9 inches.

					Watabi	Number of
Water Stocked	County	Species	Stage	Number	Weight (lbs.)	Stocking Trips
	V					•
BARREN FORK RIVER	WARREN	RAINBOW	ADULT	1,392	470	2
BATTLE CREEK	MARION	RAINBOW	ADULT	1,663	585	3
BEECH LAKE	HENDERSON	RAINBOW	ADULT	1,617	725	2
BIG ROCK CREEK	MARSHALL	RAINBOW	ADULT	774	285	2
BILLY DUNLAP PARK	MONTGOMERY	RAINBOW	ADULT	1,704	795	2
CALFKILLER RIVER	PUTNAM	RAINBOW	ADULT	1,031	360	3
CANE CREEK (HICKMAN)	HICKMAN	RAINBOW	ADULT	1,083	410	3
CANE CREEK (PERRY)	PERRY	RAINBOW	ADULT	2,076	790	3
CANE CREEK (VANBUREN)	VANBUREN	RAINBOW	ADULT	2,638	850	3
CHARLES CREEK	WARREN	RAINBOW	ADULT	1,608	540	3
COLLINS RIVER	GRUNDY	RAINBOW	ADULT	2,900	1,025	3
COWAN CITY PARK	FRANKLIN	RAINBOW	ADULT	1,094	400	3
DUCK RIVER FISHERMANS PARK	BEDFORD	RAINBOW	ADULT	763	325	1
DUCK RIVER RIVERSIDE DAM	MAURY	RAINBOW	ADULT	752	320	1
E FORK SHOAL CREEK	LAWRENCE	RAINBOW	ADULT	2,415	925	5
ELK RIVER (GRUNDY)	GRUNDY	RAINBOW	ADULT	480	185	3
FLYNNS LICK CREEK	JACKSON	RAINBOW	ADULT	953	385	3
FORT CAMPBELL	MONTGOMERY	RAINBOW	ADULT	1,150	615	1
HARPETH RIVER	WILLIAMSON	RAINBOW	ADULT	5,038	1,970	4
HURRICANE CREEK (HOUSTON)	HOUSTON	RAINBOW	ADULT	1,949	725	3
HURRICANE CREEK (HUMPHREYS)	HUMPHREYS	RAINBOW	ADULT	2,717	1,010	4
J D BUCKNER LAKE	DICKSON	RAINBOW	ADULT	1,298	605	2
JOHNSON PARK LAKE	SHELBY	RAINBOW	ADULT	1,960	915	2
KINGSTON SPRINGS LAKE	CHEATHAM	RAINBOW	ADULT	730	340	2
LAKE GRAHAM	MADISON	RAINBOW	ADULT	3,198	1,410	2
LAUREL CREEK (VANBUREN)	VANBUREN	RAINBOW	ADULT	827	276	3
LITTLE BUFFALO RIVER	LAWRENCE	RAINBOW	ADULT	2,480	930	4
LITTLE SEQUATCHIE RIVER	MARION	RAINBOW	ADULT	2,137	715	3
MARROWBONE LAKE	DAVIDSON	RAINBOW	ADULT	3,013	1,350	2
MCCUTCHEON CREEK	MAURY	RAINBOW	ADULT	1,525	600	4
MILL CREEK	HICKMAN	RAINBOW	ADULT	3,168	1,085	4
MOUNTAIN CREEK	WARREN	RAINBOW	ADULT	456	155	2
N BARREN FORK CREEK	WARREN	RAINBOW	ADULT	1,695	630	4
N CHICKAMAUGA CREEK	HAMILTON	RAINBOW	ADULT	629	220	3
PINE CREEK	DEK ALB	RAINBOW	ADULT	2,948	1,050	4
PINEY CREEK	RHEA	RAINBOW	ADULT	1,893	660	3
POCKET CREEK	MARION	RAINBOW	ADULT	1,218	405	3
ROCKY RIVER	VANBUREN	RAINBOW	ADULT	1,119	370	3
SALT LICK CREEK	MACON	RAINBOW	ADULT	718	300	2
SEQUATCHIE RIVER	CUMBERLAND	RAINBOW	ADULT	1,854	640	3

Table 4. (continued)

SHELBY FARMS	SHELBY	RAINBOW	ADULT	475	173	1
SHELBY PARK LAKE	DAVIDSON	RAINBOW	ADULT	4,605	1,900	3
SINK CREEK	DEKALB	RAINBOW	ADULT	877	315	3
STANDING ROCK CREEK	STEWART	RAINBOW	ADULT	1,405	520	3
STANDING STONE LAKE	OVERTON	RAINBOW	ADULT	450	190	1
STONE BRIDGE PARK	LINCOLN	RAINBOW	ADULT	666	325	2
SULPHUR FORK CREEK	ROBERTSON	RAINBOW	ADULT	1,021	415	2
SWEETEN CREEK	MARION	RAINBOW	ADULT	1,218	430	3
TIMS FORD TW	FRANKLIN	RAINBOW	ADULT	3,087	1,225	2
TOWN CREEK	MARION	RAINBOW	ADULT	811	275	3
TUMBLING CREEK (HUMPHREYS)	HUMPHREYS	RAINBOW	ADULT	1,806	660	3
UPPER HILLS CREEK	WARREN	RAINBOW	ADULT	606	227	2
W FORK STONES RIVER	RUTHERFORD	RAINBOW	ADULT	747	420	1
WHITEOAK CREEK	HOUSTON	RAINBOW	ADULT	1,374	510	3
TOTAL				87,811	33,936	144



**Figure 7.** Net production of trout (pounds) from 2014 to 2018 at Flintville Hatchery. Net production = gross production (pounds) – start up (pounds).

### **Buffalo Springs Hatchery**

**Location:** 20-acre site owned by TWRA is near Buffalo Springs in Grainger County.

**Hatchery Operation:** An artesian spring supplies groundwater to the hatchery at an average rate of 3,500 gallons per minute. This water is used in the hatchery building and in the outdoor raceways. Inside the hatchery building, there are three egg incubating stacks and 2 fiberglass rearing troughs and there are 23 concrete troughs (3 ft x 15 ft) for fingerling rearing. Outside there are 24 raceways (100 ft x 8 ft) in operation. The flow rate in the outdoor raceways is typically 1,200 gallons per minute.

Rainbow trout eggs are supplied to Buffalo Springs Hatchery by the USFWS national brood system. These eggs are incubated, hatched and reared to about 3 inches in length before being moved to the outside raceways. These fish are reared in outside raceways for up to 14 months until they are ready to be stocked. Due to multiply out breaks of Coldwater Fish Disease (CWD), the hatchery has been experimenting with eggs acquired from the Utah Division of Wildlife Resources. The West Virginia strain they produce has been found to be CWD resistant, Buffalo has had very good results with this stain.

Buffalo Springs Hatchery delivered approximately 67,705 5-inch rainbow trout to Erwin State Fish Hatchery where they are grown to stock size. Buffalo Springs Hatchery also provided 30,000 6-inch rainbow trout to the City of Gatlinburg, where these fish are reared and stocked into Gatlinburg streams. The rest of the trout produced at Buffalo Springs Hatchery are stocked into area streams, reservoirs and tailwaters. One driver is dedicated to hauling trout from DHNFH to Tellico Hatchery and to tailwaters and reservoirs of East Tennessee. Both trucks assigned to the hatchery (1,000 and 1,200 pound capacity) made 372 trips in 2018, of these 146 were to haul DHNFH trout.

Hatchery staff consists of a Manager, a Technician II, and two Technician I positions.

#### **ACCOMPLISHMENTS:**

- Production information (Table 5)
- Locations stocked (Table 6)
- Five-year production summary (Figure 8)

#### **Other Activities:**

- Maintain property, vehicles, and structures
- Hatchery tours to public (~500 visitors per year)
- Trout educational programs

- Kids fishing events
- Hunter safety programs
- Staff collected Chronic Wasting Disease samples at deer check-in stations
- Staff supported other fisheries and land management staff with special projects
- Staff helped with the Trout in the Classroom project, and with fourth graders in Hamblen County Schools "Forestry Days".

Table 5. Summary of Buffalo Springs Hatchery:

Number of Trout Stocked	473,808
Pounds of Trout Stocked	135,835
Total Number of Stocking Trips by Buffalo Springs	372
Number of Stocking Trips for DHNFH	146
Estimated Annual Production (lbs)*	132,985
Annual Hatchery Budget (FY17/18)**	\$387,414
Estimated Cost per Pound of Production (FY17/18)***	\$2.91
Estimated Cost per Pound of Trout Stocked (FY17/18)***	\$2.85

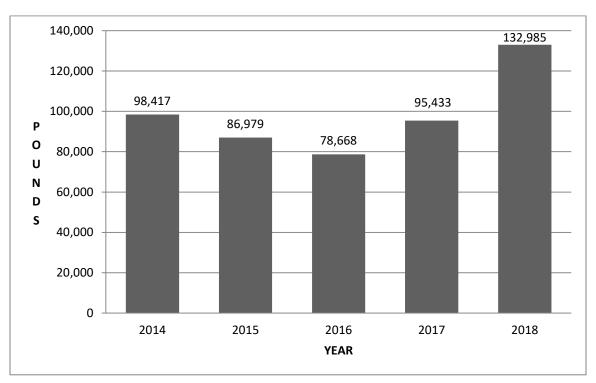
<sup>\*</sup> Production is estimated as the total pounds stocked plus trout transferred to others hatcheries.

<sup>\*\*</sup> Buffalo Spring's budget was calculated as the total spent budget (\$479,960) minus An estimated cost for the Dale Hollow driver (\$64,151) and hauling truck (\$28,425) stationed at Buffalo Springs Hatchery.

<sup>\*\*\*</sup> Cost estimates assume that all money in the budget was spent on trout production. Therefore, this is an overestimation.

Table 6. Total number and weight of trout stocked from Buffalo Springs Hatchery in Tennessee waters. FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches.

						Number of
					Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
ALEXANDER CREEK	HAWKINS	RAINBOW	ADULT	1,730	1,167	7
BASS PRO	SEVIER	RAINBOW	ADULT	150	82	2
BIG CREEK	HAWKINS	RAINBOW	ADULT	2,500	1,254	5
BOONE TW	SULLIVAN	RAINBOW	FING	28,020	706	2
BRUSH CREEK	COCKE	RAINBOW	ADULT	400	672	2
BUFFALO CREEK	GRAINGER	RAINBOW	ADULT	7,568	5,467	29
CHEROKEE TW	GRAINGER	RAINBOW	ADULT	18,606	5,948	6
COSBY CREEK	COCKE	RAINBOW	ADULT	4,000	2,206	8
FLAT FORK CREEK	MORGAN	RAINBOW	ADULT	2,000	834	4
FORT PATRICK HENRY TW	SULLIVAN	RAINBOW	FING	26,508	712	2
FOUNTAIN CITY LAKE	KNOX	RAINBOW	ADULT	250	278	1
GAP CREEK	CLAIBORNE	RAINBOW	ADULT	1,500	642	3
GULF FORK BIG CREEK	COCKE	RAINBOW	ADULT	9,900	15,632	10
INDIAN CREEK	CLAIBORNE	RAINBOW	ADULT	1,200	510	4
LAUREL CREEK (CAMPBELL)	CAMPBELL	RAINBOW	ADULT	500	303	1
LITTLE RIVER	BLOUNT	RAINBOW	ADULT	12,140	11,003	17
MIDDLE PRONG PIGEON RIVER	SEVIER	RAINBOW	ADULT	9,750	7,161	15
NORRIS TW	ANDERSON	RAINBOW	ADULT	38,711	21,620	23
NORTON CREEK	SEVIER	RAINBOW	ADULT	1,708	1,199	5
ONEDIA CITY LAKE	SCOTT	RAINBOW	ADULT	4,000	1,823	2
PANTHER CREEK	HAMBLEN	RAINBOW	ADULT	2,100	880	6
PICKETT LAKE	PICKETT	RAINBOW	ADULT	3,500	2,163	7
PUNCHEONCAMP CREEK	GRAINGER	RAINBOW	ADULT	2,000	1,006	6
RICHARDSON CREEK	HANCOCK	RAINBOW	ADULT	2,200	1,142	7
S HOLSTON RES	SULLIVAN	RAINBOW	ADULT	61,724	19,707	16
S HOLSTON TW	SULLIVAN	RAINBOW	FING	50,088	1,128	2
STATION CREEK	CLAIBORNE	RAINBOW	ADULT	600	252	4
TACKETT CREEK	CLAIBORNE	RAINBOW	ADULT	750	511	2
W PRONG LITTLE PIGEON RIVER	SEVIER	RAINBOW	ADULT	5,204	1939	2
(GATLINBURG)						
W PRONG LITTLE PIGEON RIVER	SEVIER	RAINBOW	ADULT	7,990	8203	22
(PIGEON FORGE)						
WATAUGA RES	CARTER	RAINBOW	ADULT	3,000	870	1
WILBUR TW	CARTER	RAINBOW	FING	50,003	1,097	3
TOTAL				360,300	118,117	226



**Figure 8.** Net production of trout (pounds) from 2014 to 2018 at Buffalo Springs Hatchery. Net production = gross production (pounds) – start up (pounds).

### **Erwin State Fish Hatchery**

**Location:** 11 acres owned by TWRA in the City of Erwin, Unicoi County.

**Hatchery Operation:** Water from several small springs are collected and distributed through 14 concrete, outdoor raceways. The last renovation of the raceways occurred in 1978. Each raceway is (100 ft x 6 ft). The flow rate is typically 1300 gallons per minute.

Erwin Hatchery starts its typical production cycle with 4-5 inch rainbow trout from Buffalo Springs Hatchery. These fish are received from April-June. The fish are reared in the outside raceways for up to 12 months until they are ready to be stocked into nearby streams. Typically, the adult trout stocking begins in March and lasts through June. Erwin Hatchery stocks trout with one pick-up truck that is typically driven about 15,000 miles a year. Erwin Hatchery delivers trout to about 30 waters in the surrounding seven counties, making 203 deliveries in 2018. Annually, approximately 80,000 adult trout are delivered to area waters.

Hatchery staff consists of a Manager, Technician II and Technician I.

#### **ACCOMPLISHMENTS:**

- Erwin production information (Table 7)
- Locations stocked (Table 8)
- Five-year production summary (Figure 9)

#### **Other Activities:**

- Assisted Erwin National Hatchery in stocking trout for an anti-drug abuse fishing tournament ("Say Yes To Fishing, No To Drugs")
- Kids Fishing Event Erwin Outdoor Festival. TWRA Shooting and Archery trailer
- Stocked Erwin National Hatchery's rainbow trout
- Maintain property, vehicles, and structures
- Hatchery tours for public (~2,000 visitors per year)
- Trout educational programs
- Assisted with Trout in the Classroom kid programs
- Attended Trout Unlimited Meeting in Greenville
- 14 Kids fishing events
- Seasonally assist reservoir fish attractor program
- Collect & haul fish waste to a local Wildlife Management Area
- Coordinate, stock trout, post signs, for the Paint Creek Delayed Harvest season

- Commissioned Hatchery Manager assisted with Boating and Wildlife Enforcement Details
- Taught Hunter Safety classes in Unicoi County
- Seasonally assist with stocking lake trout
- Assisted stream crew with Brook Trout Restoration at Little Jacobs Creek and Stoney Creek
- Cleaned upper spring areas of brush and trees.
- Worked dove fields opening day
- Worked deer check stations focusing on sampling efforts for CWD
- Installed new doors on hatchery building
- Installed new storm doors in hatchery office building
- Installed new windows and blinds in hatchery office building
- Installed new three new windows in manager's residence
- Assisted National Hatchery with stocking and spawning efforts
- Staff assisted Reservoirs crew with Hydro Seeding Project on Boone Reservoir
- Worked law enforcement detail on stocked trout streams and area lakes and WMA's.
- Performed pond technical assistance to private landowners
- Assist with trout and wildlife displays as well as educational talks at Appalachian Fair Exhibit
- Assist Stream Survey Crews with region four stream surveys
- Attended aquatic nuisance plants training class in Morristown
- Added new trout stocking body of water in Unicoi County (Fishery Park Pond)
- Installed new water line for Pressure Washing raceways more effectively

**Table 7. Summary of Erwin State Fish Hatchery** 

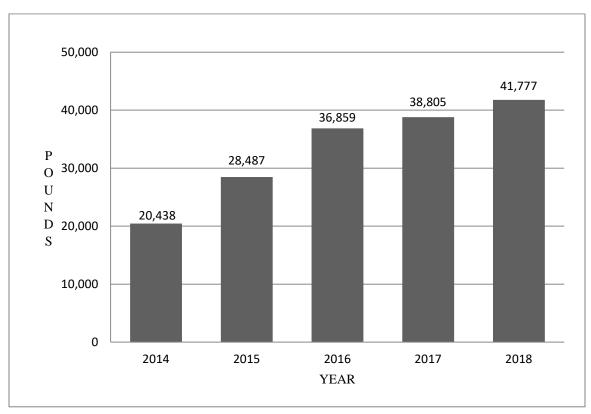
Number of Trout Stocked	80,366
Pounds of Trout Stocked	56,265
Number of Stocking Trips by Erwin drivers	203
Estimated Annual Production (lbs)*	43,792
Annual Hatchery Budget (FY17/18)	\$275,198
Estimated Cost per Pound of Production (FY17/18)**	\$6.28
Estimated Cost per Pound of Trout Stocked (FY17/18)**	\$4.89

<sup>\*</sup>Annual production was estimated by subtracting the total pounds stocked in 2018 by the number of pounds provided by Buffalo Springs and Erwin National (12,473 lbs). This estimation affects the values for both production and cost/lb.

Table 8. Total number and weight of trout stocked from Erwin State Fish Hatchery in Tennessee waters. FING = Fingerling 4-6 inch trout; ADULT = trout > 9 inches.

						Number of
					Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
BASS PRO (BRISTOL)	SULLIVAN	RAINBOW	ADULT	100	66	1
BEAVERDAM CREEK	JOHNSON	RAINBOW	ADULT	6,140	3,956	11
BOONE TW	SULLIVAN	RAINBOW	ADULT	125	1	1
BRUSH CREEK	COCKE	RAINBOW	ADULT	1,510	854	6
CASSI CREEK	GREENE	RAINBOW	ADULT	600	287	2
CLARK CREEK	UNICOI	RAINBOW	ADULT	2,120	1,216	8
DILLARD PONDS	GREENE	RAINBOW	ADULT	3,386	2,064	11
DOE CREEK	JOHNSON	RAINBOW	ADULT	3,740	2,877	15
DOE RIVER	CARTER	RAINBOW	ADULT	9,475	6,959	13
ELK RIVER (CARTER)	CARTER	RAINBOW	ADULT	1,000	653	2
FISHERY PARK POND	UNICOI	RAINBOW	ADULT	350	381	3
FORGE CREEK	JOHNSON	RAINBOW	ADULT	2,560	2,184	10
GOOSE CREEK	JOHNSON	RAINBOW	ADULT	630	519	2
HORSE CREEK	GREENE	RAINBOW	ADULT	4,630	2,865	10
LAUREL CREEK (JOHNSON)	JOHNSON	RAINBOW	ADULT	3,140	2,018	11
LAUREL FORK (CARTER)	CARTER	RAINBOW	ADULT	3,600	2,195	9
N INDIAN CREEK	UNICOI	RAINBOW	ADULT	4,920	3,455	12
PAINT CREEK	GREENE	RAINBOW	ADULT	6,570	5,843	14
REEDY CREEK	SULLIVAN	RAINBOW	ADULT	700	527	2
ROCK CREEK	UNICOI	RAINBOW	ADULT	400	236	1
ROCKY FORK	UNICOI	RAINBOW	ADULT	5,300	4,155	14
S INDIAN CREEK	UNICOI	RAINBOW	ADULT	6,230	4,601	12
SPIVEY CREEK	UNICOI	RAINBOW	ADULT	2,000	1,278	7
STONY CREEK	CARTER	RAINBOW	ADULT	3,870	2,442	12
UPPER ROAN CREEK	JOHNSON	RAINBOW	ADULT	1,500	1,002	3
WILBUR RES	CARTER	RAINBOW	ADULT	5,770	3,631	9
TOTAL				80,366	56,265	201

<sup>\*\*</sup>Cost estimates assume that all the money spent in the budget was on trout production. Therefore, this is an overestimation.



**Figure 9.** Net production of trout (pounds) from 2014 to 2018 at Erwin State Hatchery. A five-year average startup weight was used for each year because of high variability among calendar year estimates. Net production = gross production (pounds) – start up (pounds).

### **Tellico Hatchery**

**Location:** Hatchery is located on US Forest Service property in the Cherokee National Forest near the North Carolina border in Monroe County.

**Hatchery Operation:** Surface water from Tellico River, Sycamore Creek, and Pheasant Branch supply an average of 9,236 gallons per minute to outside raceways. Each of the 28 raceways is (55 ft x 8 ft). These raceways were renovated in 1992. Tellico's reliance on stream water creates seasonal and unexpected problems because staff must be prepared to remove debris from the intake structures, especially during storms. Dale Hollow National Fish Hatchery (DHNFH) delivered 167,847 6-9 inch rainbow and 27,075 brown trout to the Tellico Hatchery in 2018. These fish were grown out to 10-12 inches and stocked at 14 different locations. The brown trout were stocked specifically in the Tellico River, Hiwassee Tailwater and Green Cove Pond. During the March to September stocking season trout are stocked weekly, resulting in high stocking rates and intense fishing pressure on these waters. A small portion of Tellico trout are stocked in Polk County streams. Tellico Hatchery received approximately 25,000 rainbow trout to grow and stock in the Hiwassee River for the October/November delayed harvest season. Hatchery staff transports brood (18-27 inches) rainbow trout from Erwin National Hatchery to waterbodies around the Cumberland Plateau region throughout the year. In 2018 Tellico made 190 stocking trips.

Hatchery staff consists of a Manager, two Technician IIs and Technician I.

#### **ACCOMPLISHMENTS:**

- Production information (Table 9)
- Locations stocked (Table 10)
- Five-year production summary (Figure 10)

#### **Other Activities:**

- Successfully completed the 2018 stocking season without missing or delaying any scheduled stockings
- Carried out multiple delayed harvest stockings in Region 3 streams
- Continued to develop the "Tellico Trophy Program"
- Took over long haul delivery responsibilities thus returning the position to Tellico Hatchery
- Made significant improvements including the use of supplemental oxygen to the long haul hatchery truck, therefore significantly increasing its carrying capacity
- Tellico Hatchery and Region 3 streams staff participated in the 2018 Tellico River clean up

- Assisted in numerous public meetings, as well as provided press releases pertaining to the newly implemented trout regulations
- Assisted in three trout in the classroom releases, all of which included hatchery tours
- Partnered with Cleveland State Community College to host SWAP event at the Tellico Hatchery, in which college students from New Mexico assisted in hatchery operations, as well as stream sampling
- Gave 25 formal group tours which included Girl and Boy scouts, students ranging from elementary to college level, as well as several team building events for local manufactures
- Hatchery manager Jonathan Ellis appeared in 6 local network television interviews promoting trout fishing in Tennessee, as well as addressing environmental issues effecting trout in TN
- Broadcast the first ever TWRA Wildcast Podcast from Tellico Hatchery
- Provided local newspapers with information regarding trout fishing in the Monroe County area
- Participated in the filming of the new TWRA trout fishing promotional video
- Partnered with the US Forest Service to provide part time internships to at risk youth
- Hosted U.S. Navy personnel, family members, as well as participated in ceremonies marking the one year anniversary of the fatal T-45 Goshawk jet crash which occurred October 1<sup>st</sup> 2017
- Held two very successful Project healing waters events, one of which was the 2<sup>nd</sup> annual Project Healing Waters Tellico River Event
- Held the annual Tellico River Kids Fishing Event, which saw record attendance for the 2<sup>nd</sup> year in a row
- Provided fish for three additional kids fishing events
- Participated in the 2018 Tennessee Outdoor Youth Summit
- Provided demonstrations for the USFS at their annual Eco Days Weekend
- Participated in the 2018 Citico Creek rock dam removal
- Placed an additional three wader stations on the Hiwassee River in further efforts to prevent the spread of ANS
- Replaced old hatchery raceway lights with new LED flood lights
- Began a massive hatchery cleanup which entailed removing tons of abandoned clutter from around historic buildings as well as the general hatchery area
- Assisted Buffalo Springs Hatchery with the use of low head oxygenation units
- Assisted region three streams crew with sampling efforts on Tellico River, Hiwassee River, and Sycamore Creek

- Constructed and implemented four low head oxygenation units for Tellico Hatchery, as well as developed a water quality program to reduce mortality during summer months
- Developed a computer database which monitors and records quantity, weight, strain, and date of fish entering and leaving the hatchery. As well as raceway transfers and mortality. This new systems provides access to real time hatchery inventory, as well as vital information pertaining to fish in each raceway
- Implemented a digital calendar system which is available online, and on staff
  phones. This approach makes monthly stocking schedules, and hatchery events
  available to staff at any time. Furthermore it notifies hatchery staff and
  management of any changes to the established schedule, therefore making
  communication much more efficient and eliminating scheduling confusion
- Installed wireless security cameras to monitor hatchery head boxes and main entrance. These cameras provide water flow observation and motion activated surveillance of hatchery entrance from anywhere internet or cellular service is available
- Purchased Honda Pioneer to assist in region 3 stream stocking and sampling efforts
- Performed major overhaul of John Deere Gator
- Started renovation to hatchery bunk house
- Assisted in the organization and construction of the recently completed Moment of Freedom fishing pier on the Tellico River. This structure will provide handicapped fishermen access to the Tellico River, and will be officially dedicated and opened in early 2019

Table 9. Summary of Tellico Fish Hatchery:

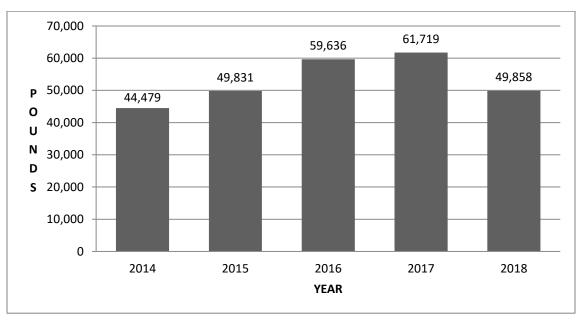
Number of Trout Stocked	143,563
Pounds of Trout Stocked	99,546
Total Number of Stocking Trips	190
Estimated Annual Production (lbs)*	41,829
Annual Hatchery Budget (FY17/18)	\$290,647
Estimated Cost per Pound of Production (FY17/18)**	\$6.95
Estimated Cost per Pound of Trout Stocked**	\$2.92

<sup>\*</sup> Annual production was estimated by subtracting the total pounds stocked in 2018 by the number of pounds received from Dale hollow, Buffalo Springs, and Erwin National hatcheries (57,717 lbs). This estimation affects the values for both production and cost/lb.

<sup>\*\*</sup> Cost estimates assume that all money in the hatchery budget was spent on trout production. Therefore, this is an overestimation.

Table 10. Total number and weight of trout stocked from Tellico Fish Hatchery in Tennessee waters. FING = 4-6 inch trout; ADULT = trout > 9 inches.

						Number of
					Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
ATHENS CITY PARK POND	MCMINN	RAINBOW	ADULT	1,016	900	3
BIG LOST CREEK	POLK	RAINBOW	ADULT	1,650	890	7
CITICO CREEK	MONROE	RAINBOW	ADULT	25,115	18,363	36
FLATT FORK CREEK	MORGAN	RAINBOW	ADULT	180	128	1
GOFORTH CREEK	POLK	RAINBOW	ADULT	1,350	748	6
GREASY CREEK	POLK	RAINBOW	ADULT	1,650	918	7
GREEN COVE POND	MONROE	BROWN	ADULT	1	6	1
GREEN COVE POND	MONROE	RAINBOW	ADULT	9,966	7,328	52
HIWASSEE TW	POLK	BROWN	ADULT	14,212	7,738	10
HIWASSEE TW	POLK	RAINBOW	ADULT	12,073	5,229	6
LAKE JUNIOR	HAMILTON	RAINBOW	ADULT	10	40	1
MCKAMEY LAKE	POLK	RAINBOW	ADULT	200	114	1
PARK SVILLE TW	POLK	RAINBOW	ADULT	1,000	2,230	1
PINEY CREEK	RHEA	RAINBOW	ADULT	500	355	1
SPRING CREEK	POLK	RAINBOW	ADULT	1,952	1,030	8
TELLICO RIVER	MONROE	BROWN	ADULT	806	1,872	29
TELLICO RIVER	MONROE	RAINBOW	ADULT	65,787	48,904	116
TELLICO RIVER	MONROE	RAINBOW	FING	8	48	1
TUMBLING CREEK	POLK	RAINBOW	ADULT	950	514	4
TURTLETOWN CREEK	POLK	RAINBOW	ADULT	700	374	3
TOTAL				139,126	97,729	294



**Figure 10.** Net production of trout (pounds) from 2014 to 2018 at Tellico Hatchery. Net production = gross production (pounds) – start up (pounds).

A five-year average startup weight was used for each year because of a high variability among calendar year startup estimates.

### **Humboldt Fish Hatchery**

Location: City of Humboldt, Gibson County, Tennessee

**Hatchery Operation:** This hatchery is one of TWRA's warmwater hatcheries. During winter, rainbow trout are provided by the Flintville and Dale Hollow Hatcheres which are held in ponds and a raceway system on this facility until the appropriate stocking date. These trout are specifically used for the Winter Trout Stocking Program in West Tennessee.

#### **ACCOMPLISHMENTS**

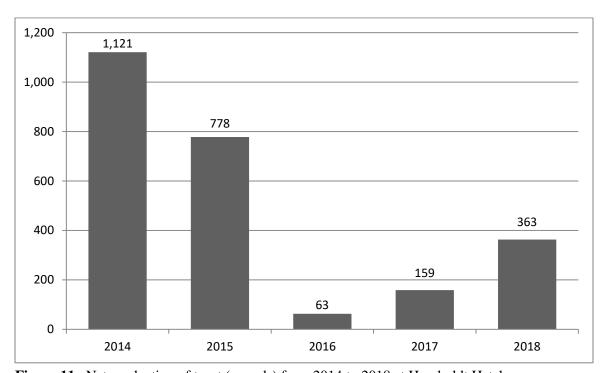
- Production information (Table 11)
- Locations stocked (Table 12)
- Five-year production summary (Figure 11)

Table 11. Summary of Humboldt Fish Hatchery:

Number of Trout Stocked	15,710
Pounds of Trout Stocked	5,729
Number of Stocking Trips by Humboldt Drivers	23

Table 12. Total number and weight of trout stocked from Humboldt Fish Hatchery in Tennessee waters. ADULT = trout > 9 inches.

					Number of
				Weight	Stocking
County	Species	Stage	Number	(lbs.)	Trips
HARDEMAN	RAINBOW	ADULT	1505	587	2
GIBSON	RAINBOW	ADULT	502		
SHELBY	RAINBOW	ADULT	2,411	858	2
SHELBY	RAINBOW	ADULT	1,011	356	2
SHELBY	RAINBOW	ADULT	1,983	774	2
WEAKLY	RAINBOW	ADULT	2,327	857	2
CARROLL	RAINBOW	ADULT	1,002	334	1
GIBSON	RAINBOW	ADULT	728	254	2
TIPTON	RAINBOW	ADULT	1,988	699	2
HENRY	RAINBOW	ADULT	255	85	1
SHELBY	RAINBOW	ADULT	504	210	1
OBION	RAINBOW	ADULT	502	183	2
SHELBY	RAINBOW	ADULT	992	349	2
			15,710	5,729	23
	HARDEMAN GIBSON SHELBY SHELBY SHELBY WEAKLY CARROLL GIBSON TIPTON HENRY SHELBY OBION	HARDEMAN RAINBOW GIBSON RAINBOW SHELBY RAINBOW SHELBY RAINBOW SHELBY RAINBOW WEAKLY RAINBOW CARROLL RAINBOW GIBSON RAINBOW TIPTON RAINBOW HENRY RAINBOW SHELBY RAINBOW OBION RAINBOW	HARDEMAN RAINBOW ADULT GIBSON RAINBOW ADULT SHELBY RAINBOW ADULT SHELBY RAINBOW ADULT SHELBY RAINBOW ADULT SHELBY RAINBOW ADULT CARROLL RAINBOW ADULT GIBSON RAINBOW ADULT TIPTON RAINBOW ADULT HENRY RAINBOW ADULT SHELBY RAINBOW ADULT OBION RAINBOW ADULT	HARDEMAN RAINBOW ADULT 1505 GIBSON RAINBOW ADULT 502 SHELBY RAINBOW ADULT 2,411 SHELBY RAINBOW ADULT 1,011 SHELBY RAINBOW ADULT 1,983 WEAKLY RAINBOW ADULT 2,327 CARROLL RAINBOW ADULT 1,002 GIBSON RAINBOW ADULT 728 TIPTON RAINBOW ADULT 1,988 HENRY RAINBOW ADULT 1,988 HENRY RAINBOW ADULT 255 SHELBY RAINBOW ADULT 504 OBION RAINBOW ADULT 504 SHELBY RAINBOW ADULT 502 SHELBY RAINBOW ADULT 992	HARDEMAN   RAINBOW   ADULT   1505   587



**Figure 11.** Net production of trout (pounds) from 2014 to 2018 at Humboldt Hatchery. Net production = gross production (pounds) – start up (pounds).

### **Gatlinburg Hatchery**

**Location:** Located in Herbert Holt Park on the North side of Gatlinburg in Sevier County.

**Hatchery Operation:** In 1981, the City of Gatlinburg transformed their old waste water treatment plant into a functional trout hatchery. Water from Dudley Creek is pumped into the hatchery's six raceways. In 1995, the facility was upgraded to insure an annual stocking of 30,000-35,000 rainbow trout. Fingerlings are provided by TWRA's Buffalo Springs Hatchery and are grown out to stocking size. These trout are stocked on Thursdays into 12 miles of streams in the city, No fishing is allowed on Thursdays, the stocking day. Due to the "Gatlinburg Fires" in November of 2016, the hatchery was shut down in 2017 for renovations.

#### **ACCOMPLISHMENTS:**

- Gatlinburg production information (Table 13)
- Locations stocked (Table 14)
- Five-year production summary (Figure 12)

**Table 13. Summary of Gatlinburg Fish Hatchery:** 

Number of Trout Stocked	40,955
Pounds of Trout Stocked	12,485
Number of Stocking Trips by Gatlinburg Drivers	53

Table 14. Total number and weight of trout stocked from Gatlinburg Fish Hatchery in Tennessee waters. ADULT = trout > 9 inches.

						Number of
		Ì			Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
LECONTE CREEK	SEVIER	RAINBOW	ADULT	390	65	3
ROARING FORK	SEVIER	RAINBOW	ADULT	980	240	6
W PRONG LITTLE PIGEON RIVER	SEVIER	RAINBOW	ADULT	39,585	12,180	44
GATLINBURG						
TOTAL				40,955	12,485	53

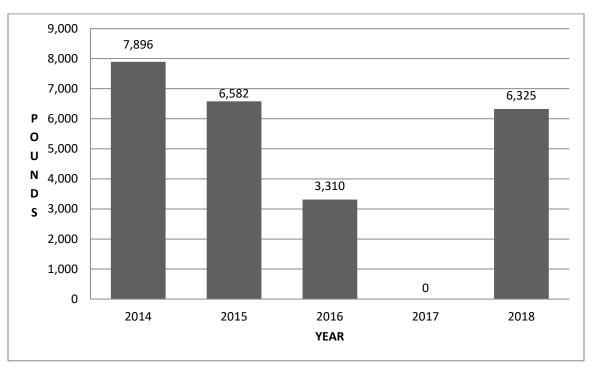


Figure 12. Net production of trout (pounds) from 2014 to 2018 at Gatlinburg Hatchery.

Net production = gross production (pounds) – start up (pounds).

Only start up poundage provided by TWRA is reflective in the graph.

Historic Gatlinburg fire shut down the hatchery in late 2016.

Hatchery restoration and repairs took the entire 2017 calendar year to complete.

### Dale Hollow National Fish Hatchery (DHNFH) - USFWS

**Location:** Celina, Tennessee, below Dale Hollow Reservoir.

**Hatchery Operation:** This hatchery is owned and operated by the USFWS. This hatchery produces most of its fish for Tennessee, but they also supply fish to North Carolina and Alabama.

TWRA coordinates DHNFH's Tennessee stocking. This process involves the Fisheries Division, Regional Fisheries Managers, and the full-time driver at Buffalo Springs Hatchery. DHNFH provides trout to Tennessee for two reasons: 1) to mitigate for the loss of local fisheries caused by federal dams, and 2) because TWRA paid for the expansion of this hatchery in 1992. Since 1994, TWRA pays \$100,000 annually to maintain production of an additional 100,000 lbs of trout to be used in Tennessee.

Dale Hollow Hatchery is much larger than TWRA hatcheries, producing over half of the trout stocked in Tennessee. DHNFH's water source is Dale Hollow Reservoir. It has 1,600 ft of 4-ft raceways for rearing small trout and 8,800 ft of 8-ft raceways for rearing larger trout. Eggs are provided from a variety of hatcheries through the USFWS egg distribution system. Unlike TWRA hatcheries, DHNFH routinely raises brown and lake trout in addition to rainbow and brook trout. TWRA hatcheries have not been successful at rearing brown and lake trout due to their limited space and water supply.

DHNFH uses two stocking trucks and help from the full-time driver from Buffalo Springs Hatchery to stock reservoirs, tailwaters, and Winter Trout Program locations. Occasionally, other TWRA hatchery trucks and personnel are used to transport trout to stocking sites and to the Humboldt Hatchery for future stocking. DHNFH does not typically stock smaller streams. DHNFH supplied approximately 194,922 trout to TWRA's Tellico Hatchery in 2018.

#### ACCOMPLISHMENTS

- Dale Hollow production information (Table 15)
- Five-year production summary (Figure 13)
- Locations stocked (Table 16)

#### **Other Tennessee Activities:**

- Hatchery tours to public
- Annual Kids Fishing Rodeo and Wilderness Day Camp
- Biologist-in-Training Program for fourth and fifth grade students

- Grow-out and distribution of Barren's topminnow
- Culture and distribution of imperiled freshwater mussels
- Cooperates with TWRA on trout stocking evaluations

Table 15. Summary of Dale Hollow National Fish Hatchery:

•	
Number of Trout Stocked	1,140,980
Pounds of Trout Stocked	262,097
Pounds Provided to Tellico Hatchery	52,771
Pounds Provided to Humboldt Hatchery	1,708
Number of Stocking Trips by DHNFH	218
Number of Stocking Trips by TWRA	169
<b>Annual Production for Tennessee (by contract)</b>	100,000
Est. Annual cost to TWRA for 100,000 pounds*	\$192,576
TWRA's cost/lb to contract 100,000 pounds	\$1.93

<sup>\* \$100,000</sup> contract plus cost of driver and hauling truck at Buffalo Springs Hatchery.

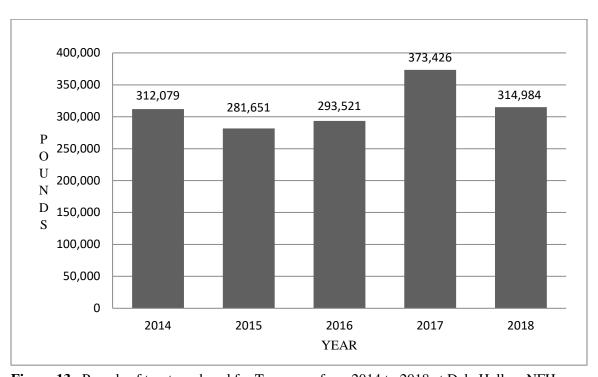


Figure 13. Pounds of trout produced for Tennessee from 2014 to 2018 at Dale Hollow NFH.

Table 16. Total number and weight of trout stocked from Dale Hollow NFH in Tennessee waters. FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches

ATHENS CITY PARK POND	MCMINN	RAINBOW	ADULT	3,014	1,028	2
BOONE TW	SULLIVAN	BROOK	ADULT	781	304	1
BOONE TW	SULLIVAN	BROWN	ADULT	15,010	4,033	5
BOONE TW	SULLIVAN	BROWN	FING	6,024	823	1
BOONE TW	SULLIVAN	RAINBOW	ADULT	14,049	4,379	7
CALDERWOOD RES	BLOUNT	RAINBOW	ADULT	7,031	2,301	4
CANE CREEK	VAN BUREN	RAINBOW	ADULT	1,999	615	1
CANE CREEK PARK LAKE	PUTNAM	RAINBOW	ADULT	4,521	1,676	3
CENTER HILL TW	DEKALB	BROOK	ADULT	12,332	4,511	6
CENTER HILL TW	DEKALB	BROWN	ADULT	47,260	10,106	10
CENTER HILL TW	DEKALB	RAINBOW	ADULT	83,699	28,507	36
CHEROKEE TW	GRAINGER	BROWN	ADULT	22,647	4,513	7
CHEROKEE TW	GRAINGER	BROWN	FING	23,794	3,006	6
CHEROKEE TW	GRAINGER	RAINBOW	ADULT	36,546	11,743	13
CHILHOWEE	BLOUNT	RAINBOW	ADULT	26,026	6,866	8
CUMBERLAND MT. STATE PARK	CUMBERLAND	RAINBOW	ADULT	1,003	339	1
DALE HOLLOW RES	CLAY	RAINBOW	ADULT	51,421	16,733	21
DALE HOLLOW TW	CLAY	BROWN	ADULT	17,139	4,237	4
DALE HOLLOW TW	CLAY	RAINBOW	ADULT	57,076	18,506	62
FORT CAMPBELL	MONTGOMERY	RAINBOW	ADULT	3,024	955	4
FORT PATRICK HENRY TW	SULLIVAN	BROWN	ADULT	15,006	4,117	7
FORT PATRICK HENRY TW	SULLIVAN	BROWN	FING	10,003	1,023	3
FORT PATRICK HENRY TW	SULLIVAN	RAINBOW	ADULT	10,540	3,672	4
GEORGE HOLE	VAN BUREN	BROOK	ADULT	1,346	520	1
GEORGE HOLE	VAN BUREN	RAINBOW	ADULT	1,017	424	2
HIWASSEE TW	POLK	BROOK	ADULT	4,853	1,801	2
HIWASSEE TW	POLK	RAINBOW	ADULT	47,289	15,842	22
J PERCY PRIEST TW	DAVIDSON	RAINBOW	ADULT	16,798	5,865	7
LAFAYETTE CITY PARK LAKE	MACON	RAINBOW	ADULT	1,502	599	2
LAKE JUNIOR	HAMILTON	RAINBOW	ADULT	6,015	2,011	3
MCKENZIE CITY PARK LAKE	CARROLL	RAINBOW	ADULT	1,004	368	1
MONTEREY LAKE	PUTNAM	RAINBOW	ADULT	1,000	338	1
NORMANDY TW	BEDFORD	RAINBOW	ADULT	28,584	9,886	13
NORRIS TW	ANDERSON	BROWN	ADULT	20,051	4,179	4
NORRIS TW	ANDERSON	RAINBOW	ADULT	300	145	1
NORRIS TW	ANDERSON	RAINBOW	FING	29,848	1,399	2
PARIS CITY PARK	HENRY	RAINBOW	ADULT	174	64	1
PICKETT LAKE	PICKETT	RAINBOW	ADULT	1,004	324	1
S HOLSTON RES	SULLIVAN	LAKE	ADULT	31,822	2,901	4
S HOLSTON RES	SULLIVAN	BROWN	ADULT	25,043	5,520	6

Table 16. (continued)

S HOLSTON RES	SULLIVAN	RAINBOW	ADULT	5,001	1,232	2
S HOLSTON TW	SULLIVAN	RAINBOW	ADULT	47,036	14,813	17
TELLICO RES	MONROE	RAINBOW	ADULT	9,503	2,780	4
TIMS FORD TW	FRANKLIN	BROOK	ADULT	3,010	1,214	1
TIMS FORD TW	FRANKLIN	BROWN	ADULT	20,010	4,369	6
TIMS FORD TW	FRANKLIN	RAINBOW	ADULT	35,009	11,712	13
TN AQUARIUM	HAMILTON	BROOK	ADULT	20	4	1
TN AQUARIUM	HAMILTON	RAINBOW	ADULT	10	2	1
VA HOSPITAL POND	RUTHERFORD	RAINBOW	ADULT	2,001	746	2
W FORK STONES RIVER	RUTHERFORD	RAINBOW	ADULT	10,488	3,918	9
WATAUGA RES	CARTER	BROWN	ADULT	25,033	5,178	6
WATAUGA RES	CARTER	LAKE	ADULT	8,052	775	1
WATAUGA RES	CARTER	RAINBOW	ADULT	48,675	14,544	18
WILBUR TW	CARTER	RAINBOW	ADULT	37,576	12,208	11
WOLF RIVER	FENTRESS	RAINBOW	ADULT	2,260	831	1
TOTAL				941,279	260,505	382

### **Erwin National Fish Hatchery - USFWS**

Location: City of Erwin, Unicoi County, Tennessee.

**Hatchery Operation:** Erwin National Fish Hatchery (ENFH) is one of several broodstock facilities managed by the USFWS across the country. These facilities maintain a disease-free source of eggs for federal and state fish hatcheries. These hatcheries raise trout to maturity (over 2 years), then use these trout to produce fertilized eggs that are sent around the country as requested. They use some of the eggs to replace the adults that have already been used for spawning. The fish that are no longer useful for egg production are stocked into a few nearby streams and other locations requested by TWRA. The ENFH also provides a number of these fish to the Cherokee Nation in Cherokee, North Carolina.

The trout stocked by ENFH are large, usually 14 to 20 inches in length, so local anglers are pleased to catch these fish. Erwin State Fish Hatchery often stocks these fish for ENFH. TWRA's involvement allows these fish to be spread over more locations.

#### ACCOMPLISHMENTS

- Production information (Table 17)
- Locations stocked (Table 18)
- Five year production summary (Figure 13)

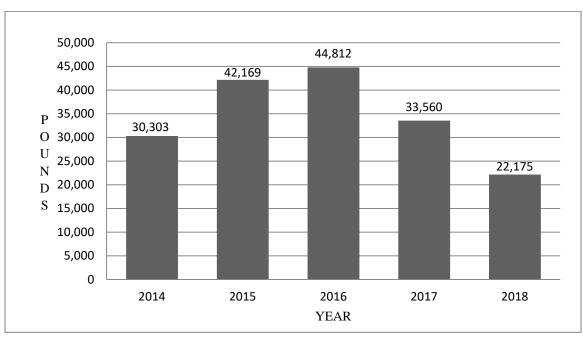
**Table 17. Summary of Erwin National Fish Hatchery:** 

Number of Trout Stocked	32,942
Pounds of Trout Stocked	22,175
Number of Stocking Trips by Erwin Drivers	32

Table 18. Total number and weight of trout stocked from Erwin National Fish Hatchery in Tennessee waters. FING = Fingerling, 4-6 inch trout; ADULT = trout > 12 inches.\*

						Number of
					Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
DILLARD PONDS	GREENE	RAINBOW	ADULT	300	705	1
FISHERY PARK POND	UNICOI	RAINBOW	ADULT	366	875	2
N INDIAN CREEK	UNICOI	RAINBOW	ADULT	552	1,325	2
N INDIAN CREEK	UNICOI	RAINBOW	FING	7,200	200	1
NOLICHUCKY RIVER	UNICOI	BROOK	ADULT	256	602	1
NOLICHUCKY RIVER	UNICOI	RAINBOW	ADULT	750	1,785	2
ROCK CREEK	UNICOI	RAINBOW	ADULT	100	235	1
S INDIAN CREEK	UNICOI	BROOK	ADULT	1,422	1,252	2
S INDIAN CREEK	UNICOI	RAINBOW	ADULT	2,085	3,021	3
WILBUR RES	CARTER	RAINBOW	ADULT	3,099	7,500	8
WILBUR TW	CARTER	RAINBOW	ADULT	14,829	548	2
TOTAL				30,959	18,048	25

<sup>\*</sup>Includes some trips made by Erwin State Fish Hatchery.



**Figure 13.** Production of trout (pounds) stocked in Tennessee from 2014 to 2018 by Erwin National Fish Hatchery.

### Appendix A

## **Stocking Totals by Program Type**

(Includes all State and Federal Hatcheries)

### **Tailwater Stocking Totals - 2018**

FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches.

						Number of
					Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
BOONE TW	SULLIVAN	BROOK	ADULT	14,754	5,235	5
BOONE TW	SULLIVAN	BROWN	ADULT	20,050	5,187	6
BOONE TW	SULLIVAN	BROWN	FING	10,010	1,209	1
BOONE TW	SULLIVAN	RAINBOW	ADULT	4,010	1,269	1
CENTER HILL TW	DEKALB	BROOK	ADULT	51,287	16,439	23
CENTER HILL TW	DEKALB	BROWN	ADULT	43,847	10,715	13
CENTER HILL TW	DEKALB	BROWN	FING	50,106	1,619	4
CENTER HILL TW	DEKALB	RAINBOW	ADULT	108,732	35,088	47
CHEROKEE TW	GRAINGER	BROWN	ADULT	15,020	3,088	4
CHEROKEE TW	GRAINGER	BROWN	FING	20,024	2,213	3
CHEROKEE TW	GRAINGER	RAINBOW	ADULT	17,049	5,572	4
DALE HOLLOW TW	CLAY	BROWN	ADULT	10,013	2,214	3
DALE HOLLOW TW	CLAY	RAINBOW	ADULT	54,946	18,128	66
FORT PATRICK HENRY TW	SULLIVAN	BROWN	ADULT	25,023	5,140	6
FORT PATRICK HENRY TW	SULLIVAN	RAINBOW	ADULT	5,303	1,693	2
FORT PATRICK HENRY TW	SULLIVAN	RAINBOW	FING	7,500	142	1
HIWASSEE TW	POLK	BROOK	ADULT	12,825	3,934	4
HIWASSEE TW	POLK	RAINBOW	ADULT	82,195	27,341	27
HIWASSEE TW	POLK	BROWN	ADULT	15,571	6,921	6
PERCY PRIEST TW	DAVIDSON	RAINBOW	ADULT	14,164	4,856	4
NORMANDY TW	BEDFORD	RAINBOW	ADULT	23,778	7,618	12
NORRIS TW	ANDERSON	BROOK	ADULT	37,526	11,720	14
NORRIS TW	ANDERSON	BROWN	ADULT	20,029	4,237	5
NORRIS TW	ANDERSON	BROWN	FING	20,076	621	1
NORRIS TW	ANDERSON	RAINBOW	ADULT	39,105	17,685	24
NORRIS TW	ANDERSON	RAINBOW	FING	99,560	4,387	7
PARKSVILLE TW	POLK	RAINBOW	ADULT	1,654	936	11
S HOLSTON TW	SULLIVAN	RAINBOW	ADULT	47,008	15,591	16
S HOLSTON TW	SULLIVAN	RAINBOW	FING	53,295	435	1
TIMS FORD TW	FRANKLIN	BROOK	ADULT	3,009	977	1
TIMS FORD TW	FRANKLIN	BROWN	ADULT	21,304	5,126	8
TIMS FORD TW	FRANKLIN	RAINBOW	ADULT	37,132	12,178	21
WILBUR RES	CARTER	RAINBOW	ADULT	13,881	9,976	19
WILBUR TW	CARTER	LAKE	ADULT	2,929	765	1
WILBUR TW	CARTER	RAINBOW	ADULT	38,249	15,099	18
WILBUR TW	CARTER	RAINBOW	FING	103,622	4,249	6
TOTAL				1,144,586	269,603	395

# Reservoir Stocking Totals – 2018\* FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches

					Number of
				Weight	Stocking
County	Species	Stage	Number	(lbs.)	Trips
BLOUNT	RAINBOW	ADULT	7,031	2,301	4
SULLIVAN	RAINBOW	ADULT	7,000	3,210	2
BLOUNT	RAINBOW	ADULT	26,026	6,866	8
CLAY	RAINBOW	ADULT	51,421	16,733	21
POLK	RAINBOW	ADULT	1,000	2,230	1
SULLIVAN	BROWN	ADULT	25,043	5,520	6
SULLIVAN	LAKE	ADULT	31,822	2,901	4
SULLIVAN	RAINBOW	ADULT	66,725	20,939	18
MONROE	RAINBOW	ADULT	9,503	2,780	4
CARTER	BROWN	ADULT	25,033	5,178	6
CARTER	LAKE	ADULT	8,052	775	1
CARTER	RAINBOW	ADULT	51,675	15,414	19
			310,331	84,847	94
	BLOUNT SULLIVAN BLOUNT CLAY POLK SULLIVAN SULLIVAN SULLIVAN MONROE CARTER CARTER	BLOUNT RAINBOW SULLIVAN RAINBOW BLOUNT RAINBOW CLAY RAINBOW POLK RAINBOW SULLIVAN BROWN SULLIVAN LAKE SULLIVAN RAINBOW MONROE RAINBOW CARTER BROWN CARTER LAKE	BLOUNT RAINBOW ADULT SULLIVAN RAINBOW ADULT BLOUNT RAINBOW ADULT CLAY RAINBOW ADULT POLK RAINBOW ADULT SULLIVAN BROWN ADULT SULLIVAN LAKE ADULT SULLIVAN RAINBOW ADULT SULLIVAN RAINBOW ADULT CARTER BROWN ADULT CARTER BROWN ADULT	BLOUNT         RAINBOW         ADULT         7,031           SULLIVAN         RAINBOW         ADULT         7,000           BLOUNT         RAINBOW         ADULT         26,026           CLAY         RAINBOW         ADULT         51,421           POLK         RAINBOW         ADULT         1,000           SULLIVAN         BROWN         ADULT         25,043           SULLIVAN         LAKE         ADULT         31,822           SULLIVAN         RAINBOW         ADULT         66,725           MONROE         RAINBOW         ADULT         9,503           CARTER         BROWN         ADULT         25,033           CARTER         LAKE         ADULT         8,052           CARTER         RAINBOW         ADULT         51,675	County         Species         Stage         Number         (lbs.)           BLOUNT         RAINBOW         ADULT         7,031         2,301           SULLIVAN         RAINBOW         ADULT         7,000         3,210           BLOUNT         RAINBOW         ADULT         26,026         6,866           CLAY         RAINBOW         ADULT         51,421         16,733           POLK         RAINBOW         ADULT         1,000         2,230           SULLIVAN         BROWN         ADULT         25,043         5,520           SULLIVAN         LAKE         ADULT         31,822         2,901           SULLIVAN         RAINBOW         ADULT         66,725         20,939           MONROE         RAINBOW         ADULT         9,503         2,780           CARTER         BROWN         ADULT         25,033         5,178           CARTER         LAKE         ADULT         8,052         775           CARTER         RAINBOW         ADULT         51,675         15,414

<sup>\*</sup> Above totals are used to show which reservoirs were stocked in the 2018 calendar year. However, reservoirs are stocked December through January, depending on weather and size of trout, therefore calendar year totals can be misleading. For example, TWRA could stock a reservoir in December, and then stock it 13 months later in the following January. From a calendar year perspective, it would appear that TWRA skipped a year, when in fact each winter that reservoir received similar numbers of trout.

# Streams and Lakes Stocked in Spring and Summer – 2018 FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches.

						Numbe r of
					Weight	Stocking
Water Stocked	County	Species	Stage	Numbe r	(lbs.)	Trips
ALEXANDER CREEK	HAWKINS	RAINBOW	ADULT	1,730	1,167	7
ATHENS CITY PARK	MCMINN	RAINBOW	ADULT	1,006	860	2
BARREN FORK RIVER	WARREN	RAINBOW	ADULT	1,392	470	2
BATTLE CREEK	MARION	RAINBOW	ADULT	1,663	585	3
BEAVERDAM CREEK	JOHNSON	RAINBOW	ADULT	6,140	3,956	11
BIG CREEK	HAWKINS	RAINBOW	ADULT	2,500	1,254	5
BIG LOST CREEK	POLK	RAINBOW	ADULT	1,650	890	7
BRUSH CREEK	COOKE	RAINBOW	ADULT	1,910	1,526	8
BUFFALO CREEK	GRAINGER	RAINBOW	ADULT	7,568	5,467	29
CALFKILLER RIVER	PUTNAM	RAINBOW	ADULT	1,031	360	3
CANE CREEK	HICKMAN	RAINBOW	ADULT	1,083	410	3
CANE CREEK	PERRY	RAINBOW	ADULT	2,076	790	3
CANE CREEK	VAN BURREN	RAINBOW	ADULT	4,637	1,465	4
CASSI CREEK	GREENE	RAINBOW	ADULT	600	287	2
CHARLES CREEK	WARREN	RAINBOW	ADULT	1,608	540	3
CITICO CREEK	MONROE	RAINBOW	ADULT	25,115	18,363	36
CLARK CREEK	UNICOI	RAINBOW	ADULT	2,120	1,216	8
COLINS RIVER	GRUNDY	RAINBOW	ADULT	2,900	1,025	3
COSBY CREEK	COOKE	RAINBOW	ADULT	4,000	2,206	8
DILLARD PONDS	GREENE	RAINBOW	ADULT	3,686	2,769	12
DOE CREEK	JOHNSON	RAINBOW	ADULT	3,740	2,877	15
DOE RIVER	CARTER	RAINBOW	ADULT	9,475	6,959	13
E FORK SHOAL CREEK	LAWRENCE	RAINBOW	ADULT	2,415	925	5
ELK RIVER	CARTER	RAINBOW	ADULT	1,000	653	2
ELK RIVER	GRUNDY	RAINBOW	ADULT	480	185	3
FLAT FORK CREEK	MORGAN	RAINBOW	ADULT	2,180	962	5
FLYNNS LICK CREEK	JACKSON	RAINBOW	ADULT	953	385	3
FORGE CREEK	JOHNSON	RAINBOW	ADULT	2,560	2,184	10
FORT CAMPBELL	MONTGOMERY	RAINBOW	ADULT	4,574	1,570	5
GAP CREEK	CLAIBORNE	RAINBOW	ADULT	1,500	642	3
GOFORTH CREEK	POLK	RAINBOW	ADULT	1,350	748	6
GREASY CREEK	POLK	RAINBOW	ADULT	1,650	918	7
GREEN COVE POND	MONROE	BROWN	ADULT	1	6	1
GREEN COVE POND	MONROE	RAINBOW	ADULT	9,966	7,328	52
GULF FORK BIG CREEK	COCKE	RAINBOW	ADULT	9,900	15,632	10

### Streams and Lakes Stocked in Spring and Summer – 2018 (Continued)

HORSE CREEK	GREENE	RAINBOW	ADULT	4,630	2,865	10
HURRICANE CREEK	HOUSTON	RAINBOW	ADULT	1,949	725	3
HURRICANE CREEK	HUMPHREYS	RAINBOW	ADULT	2,717	1,010	4
INDIAN CREEK	CLAIBORNE	RAINBOW	ADULT	1,200	510	4
LAUREL CREEK	JOHNSON	RAINBOW	ADULT	3,140	2,018	11
LAUREL CREEK	VAN BURREN	RAINBOW	ADULT	827	276	3
LAUREL FORK	CAMPBELL	RAINBOW	ADULT	500	303	1
LAUREL FORK	CARTER	RAINBOW	ADULT	3,600	2,195	9
LITTLE BUFFALO RIVER	LAWRENCE	RAINBOW	ADULT	2,480	930	4
LITTLE RIVER	BLOUNT	RAINBOW	ADULT	12,140	11,003	17
LITTLE SEQUATCHIE RIVER	MARION	RAINBOW	ADULT	2,137	715	3
MCKAMEY LAKE	POLK	RAINBOW	ADULT	200	114	1
MIDDLE PRONG PIGEON RIVER	SEVIER	RAINBOW	ADULT	9,750	7,161	15
MILL CREEK	HICKMAN	RAINBOW	ADULT	3,168	1,085	4
MOUNTAIN CREEK	WARREN	RAINBOW	ADULT	456	155	2
N BARREN FORK CREEK	WARREN	RAINBOW	ADULT	1,695	630	4
N CHICKAMAUGA CREEK	HAMILTON	RAINBOW	ADULT	629	220	3
N INDIAN CREEK	UNICOI	RAINBOW	ADULT	5,472	4,780	14
N INDIAN CREEK	UNICOI	RAINBOW	FING	7,200	200	1
NOLICHUCKY RIVER	UNICOI	BROOK	ADULT	256	602	1
NOLICHUCKY RIVER	UNICOI	RAINBOW	ADULT	750	1,782	2
PAINT CREEK	GREENE	RAINBOW	ADULT	4,720	3,393	11
PANTHER CREEK	HAMBLEN	RAINBOW	ADULT	2,100	880	6
PICKETT LAKE	PICKETT	RAINBOW	ADULT	4,504	2,487	8
PINE CREEK	DEKALB	RAINBOW	ADULT	2,948	1,050	4
PINEY CREEK	RHEA	RAINBOW	ADULT	1,893	660	3
POCKET CREEK	MADISON	RAINBOW	ADULT	1,218	405	3
PUNCHEONCAMP REEK	GRAINGER	RAINBOW	ADULT	2,000	1,006	6
RICHARDSON CREEK	HANCOCK	RAINBOW	ADULT	2,200	1,142	7
ROCK CREEK	UNICOI	RAINBOW	ADULT	500	471	2
ROCKY FORK	UNICOI	RAINBOW	ADULT	5,300	4,155	14
ROCKY RIVER	VAN BURREN	RAINBOW	ADULT	1,119	370	3
S INDIAN CREEK	UNICOI	BROOK	ADULT	1,422	1,252	2
S INDIAN CREEK	UNICOI	RAINBOW	ADULT	8,315	7,622	15
SALT LICK CREEK	MACON	RAINBOW	ADULT	718	300	2
SEQUATCHIE RIVER	CUMBERLAND	RAINBOW	ADULT	1,854	640	3
SINK CREEK	DEKALB	RAINBOW	ADULT	877	315	3
SPIVEY CREEK	UNICOI	RAINBOW	ADULT	2,000	1,278	7
SPRING CREEK	POLK	RAINBOW	ADULT	1,952	1,030	8
STANDING ROCK CREEK	STEWART	RAINBOW	ADULT	1,405	520	3
STANDING STONE LAKE	OVERTON	RAINBOW	ADULT	450	190	1
STATION CREEK	CLAIBORNE	RAINBOW	ADULT	600	252	4
STONY CREEK	CARTER	RAINBOW	ADULT	3,870	2,442	12
SWEETEN CREEK	MARION	RAINBOW	ADULT	1,218	430	3

### Streams and Lakes Stocked in Spring and Summer – 2018 (Continued)

TOTAL				310,327	231,773	/40
TOTAL	TENTRESS	TO THE OW	71DOL1	370,329	231,793	746
WOLF RIVER	FENTRESS	RAINBOW	ADULT	2,260	831	3
WHITE OAK CREEK	HOUSTON	RAINBOW	ADULT	1,374	510	3
( PIGEON FORGE)	SEVIER	RAINBOW	ADULT	7,990	8,203	22
WEST PRONG LITTLE PIGEO	N RIVER					
(GATLINGBURG)	SEVIER	RAINBOW	ADULT	44,789	14,119	46
WEST PRONG LITTLE PIGEO	N RIVER					
UPPER ROAN CREEK	JOHNSON	RAINBOW	ADULT	1,500	1,002	5
UPPER HILLS CREEK	WARREN	RAINBOW	ADULT	606	227	2
TURTLE TOWN CREEK	POLK	RAINBOW	ADULT	700	374	3
TUMBLING CREEK	POLK	RAINBOW	ADULT	950	514	4
TUMBLING CREEK	HUMPHREYS	RAINBOW	ADULT	1,806	660	3
TOWN CREEK	MARION	RAINBOW	ADULT	811	275	3
TELLICO RIVER	MONROE	BROWN	ADULT	281	599	13
TELLICO RIVER	MONROE	RAINBOW	ADULT	62,274	44,819	92
TACKETT CREEK	CLAIBORNE	RAINBOW	ADULT	750	511	2

### Winter Trout Program Stocking – 2018 FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches.

						Number of
					Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
ATHENS CITY PARK POND	MCMINN	RAINBOW	ADULT	3,024	1,068	3
BEECH LAKE	HENDERSON	RAINBOW	ADULT	1,617	725	2
BIG ROCK CREEK	MARSHALL	RAINBOW	ADULT	774	285	2
BILLY DUNLAP PARK	MONTGOMERY	RAINBOW	ADULT	1,704	795	2
BOLIVAR PARK	SHELBY	RAINBOW	ADULT	1,505	587	2
BRADFORD CITY POND	GIBSON	RAINBOW	ADULT	502	183	2
CAMERON BROWN LAKE	SHELBY	RAINBOW	ADULT	2,411	858	2
CANE CREEK PARK LAKE	PUTNAM	RAINBOW	ADULT	4,521	1,676	3
COWAN CITY PARK	FRANKLIN	RAINBOW	ADULT	1,094	400	3
CUMBERLAND MT. STATE PARK	CUMBERLAND	RAINBOW	ADULT	1,003	339	1
DAVIS PLANTATION PARK	SHELBY	RAINBOW	ADULT	1,011	356	2
DUCK RIVER RIVERSIDE DAM	MAURY	RAINBOW	ADULT	763	325	1
DUCK RIVER FISHERMANS PARK	BEDFORD	RAINBOW	ADULT	752	320	1
EDMUND-ORGILL PARK LAKE	SHELBY	RAINBOW	ADULT	1,983	774	2
FOUNTAIN CITY LAKE	KNOX	RAINBOW	ADULT	250	278	1
GEORGE HOLE	VAN BUREN	BROOK	ADULT	1,346	520	1
GEORGE HOLE	VAN BUREN	RAINBOW	ADULT	1,017	424	2
HARPETH RIVER	WILLIAMSON	RAINBOW	ADULT	5,038	1,970	4
J D BUCKNER LAKE	DICKSON	RAINBOW	ADULT	1,298	605	2
J PERCY PRIEST TW	DAVIDSON	RAINBOW	ADULT	16,798	5,865	7
JOHNSON PARK LAKE	SHELBY	RAINBOW	ADULT	1,960	915	2
KINGSTON SPRINGS LAKE	CHEATHAM	RAINBOW	ADULT	730	340	2
LAFAYETTE CITY PARK LAKE	MACON	RAINBOW	ADULT	1,502	599	2
LAKE GRAHAM	MADISON	RAINBOW	ADULT	3,198	1,410	2
LAKE JUNIOR	HAMILTON	RAINBOW	ADULT	6,025	2,051	4
MARROWBONE LAKE	DAVIDSON	RAINBOW	ADULT	3,013	1,350	2
MARTIN CITY LAKE	WEAKLEY	RAINBOW	ADULT	2,327	857	2
MCCUTCHEON CREEK	MAURY	RAINBOW	ADULT	1,525	600	4
MCKENZIE CITY LAKE	CARROLL	RAINBOW	ADULT	2,006	702	2
MILAN CITY POND	GIBSON	RAINBOW	ADULT	728	254	2
MONTEREY LAKE	PUTNAM	RAINBOW	ADULT	1,000	338	1
MUNFORD CITY PARK LAKE	TIPTON	RAINBOW	ADULT	1,988	699	2
ONEIDA CITY LAKE	SCOTT	RAINBOW	ADULT	4,000	1,823	2
PARIS CITY LAKE	HENRY	RAINBOW	ADULT	429	149	2
SHELBY FARMS	SHELBY	RAINBOW	ADULT	979	383	2
SHELBY PARK LAKE	DAVIDSON	RAINBOW	ADULT	4,605	1,900	3
STONE BRIDGE PARK	LINCOLN	RAINBOW	ADULT	666	325	2
SULPHUR FORK CREEK	ROBERTSON	RAINBOW	ADULT	1,021	415	2
UNION CITY LAKE	OBION	RAINBOW	ADULT	502	183	2
VA HOSPITAL POND	RUTHERFORD	RAINBOW	ADULT	2,001	746	2
W FORK STONES RIVER	RUTHERFORD	RAINBOW	ADULT	11,235	4,338	10
YALE ROAD CITY POND	SHELBY	RAINBOW	ADULT	992	349	2
TOTAL	SILLEDI	TO HIT IDO W	710011	100,843	39,079	101
101711				100,043	57,077	101

### Delayed-Harvest Program – 2018 FING = Fingerling, 4-6 inch trout; ADULT = trout > 9 inches.

						Number of
					Weight	Stocking
Water Stocked	County	Species	Stage	Number	(lbs.)	Trips
HIWASSEE TW	POLK	BROOK	ADULT	4,853	1,801	2
HIWASSEE TW	POLK	BROWN	ADULT	14,212	7,738	10
HIWASSEE TW	POLK	RAINBOW	ADULT	20,881	7,630	9
PAINT CREEK	GREENE	RAINBOW	ADULT	1,850	2,450	3
PINEY CREEK	RHEA	RAINBOW	ADULT	500	355	1
TELLICO RIVER	MONROE	BROWN	ADULT	525	1,273	16
TELLICO RIVER	MONROE	RAINBOW	ADULT	3,513	4,085	24
TELLICO RIVER	MONROE	RAINBOW	FING	8	48	1
TOTAL				46,342	25,380	66